

SEMICONDUCTOR DEVICE AND

METHOD OF FABRICATING THE SAME

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BACKGROUND OF THE INVENTION

5 1. Field of the Invention

The present invention relates to a semiconductor device including a circuit constituted by thin film transistors (hereinafter referred to as "TFTs"). Particularly the present invention relates to the structure of, for example, an electro-optical device typified by a liquid crystal display device or an EL (electroluminescence) display 10 device, a semiconductor circuit, and an electronic instrument (electronic equipment) using the electro-optical device or the semiconductor circuit of the invention.

Incidentally, the semiconductor device in the present specification indicates any devices functioning by using semiconductor characteristics, and all of the electro-optical device, the semiconductor circuit, and the electronic instrument are included in 15 the semiconductor device.

2. Description of the Related Art

Since a thin film transistor (hereinafter referred to as a "TFT") can be formed on a transparent substrate, development to apply it to an active matrix type liquid crystal display (hereinafter referred to as an "AM-LCD") has been actively made. Since 20 a TFT using a crystalline semiconductor film (typically, polysilicon film) can obtain a high mobility, it is possible to realize a high fineness image display by integrating functional circuits on the same substrate.

Basically, the AM-LCD includes a pixel region (also called a pixel matrix circuit) for displaying an image, a gate driving circuit (also called a gate driver circuit) 25 for driving a TFT of each of pixels arranged in the pixel region, and a source driving